

## **REMARKS**

In response to the Examiner's Action mailed on April 9, 2007, claims 1-4, 6-7, 14-15, 19-21, and 25-26 are amended. The applicant hereby respectfully requests that the patent application be reconsidered.

An item-by-item response to Examiner's objections or rejections is provided in the followings:

### **1. *Rejections of claims Under 35 USC 103***

The Examiner rejects claims 1, 3, 4, 6, and 9 under 35 USC 103(a) as being unpatentable over Lippman et al (Patent 5,936,603) in view of Lijima et al. The Examiner further rejects claims 14-17 and 20-23 under 35 USC 103(a) as being unpatentable over Lippman in view of Wood. The Examiner further rejects claims 2, 11, and 12 under 35 USC 103(a) as being unpatentable over Lippman in view of Lijima and Wood. The Examiner further rejects claim 5 under 35 USC 103(a) as being unpatentable over Lippman in view of Lijima and Yasue. The Examiner further rejects claim 7 under 35 USC 103(a) as being unpatentable over Lippman in view of the 10<sup>th</sup> Mediterranean Electrotechincal Conference, MeleCon 2000, Vol. II. The Examiner further rejects claim 8 under 35 USC 103(a) as being unpatentable over Lippman and Lijima in view of AAPA. The Examiner further rejects claim 10 under 35 USC 103(a) as being unpatentable over Lippman in view of Levy. The Examiner further rejects claim 13 under 35 USC 103(a) as being unpatentable over Lippman in view of Waterman. The Examiner further rejects claims 18 and 24 under 35 USC 103(a) as being unpatentable over Lippman in view of Wood and Yasue. The Examiner further rejects claims 19 and 25 under 35 USC 103(a) as being unpatentable over Lippman in view of Wood and Lijima. The Examiner further rejects claim 26 under 35 USC 103(a) as being unpatentable over Lippman in view of Wood and Yasue.

In response to the rejections, the Applicant would first like to traverse the rejections of claims 1, 3-4, 6, and 9 on the basis of Lippman and Lijima. According to the Examiner, Lijima teaches

"a temperature sensor system disposed directly onboard of a liquid crystal panel (column 7, lines 19-23) formed together with the driving circuit on a silicon substrate (column 5, lines 44-47)" (Directly quoted from the Office Action)

The Applicant would like to respectfully disagree with Examiner's characterization of the disclosures of Lijima. The Applicant would like to first direct Examiner's attention to the Lijima's descriptions:

1) Column 7, Lines 19-32 of Lijima:

Concerning the liquid crystal device 1 of the embodiment, a temperature sensor 70 is provided for directly sensing the temperature of the liquid crystal panel 10 or sensing the temperature of the environment in which the liquid crystal panel 10 is disposed. Based on the temperature detection results obtained by the **temperature sensor 70**, a temperature compensating circuit (temperature compensating device) 80 sets the driving signals supplied from the driving circuits 20 and 30 to the liquid crystal panel 10 to be low frequency signals at a low temperature and sets the driving signals supplied from the driving circuits 20 and 30 to the liquid crystal panel 10 to be high frequency signals at a high temperature. This is described in detail in the following description.

2) Column 5, 44-47 of Lijima:

According to various exemplary embodiments of the present invention, the **temperature sensor is a thermistor** formed together with the driving circuit in a semiconductor device. Such a thermistor can be formed on a silicon substrate in a manner similar to forming other circuits.

The Applicant would like to direct Examiner's attention to the facts:

- 1) Lijima never disclosed "a temperature sensor system ***disposed directly onboard of a liquid crystal panel*** according to above direct quote from Lijima's column 7, lines 19-23. Lijima never make any specific statement about the "LOCATION" of the temperature sensor. Lijima did mention

"direct sensing of temperature" but the "direct sensing of temperature" is not equivalent to "directly onboard of a liquid crystal panel". (As will be further discussed below by referring to Fig. 1 of Lijima)

- 2) Forming a thermistor together with the driving circuits as an integrated circuit (IC) on a silicon substrate does not necessarily lead to a temperature sensor system "disposed directly onboard of a liquid crystal panel".
- 3) The Applicant would like to direct Examiner's attention to Fig. 1 and the descriptions as quoted above for Fig. 1. The temperature sensor 70 is actually shown as a thermistor that is NOT ONBOARD of the liquid crystal panel.

For above reasons, the Applicant would like to respectfully disagree with the Examiner about the obviousness of the claims. In fact by referring to Lijima's descriptions and Fig. 1, Lijima teaches away from the claims as now amended.

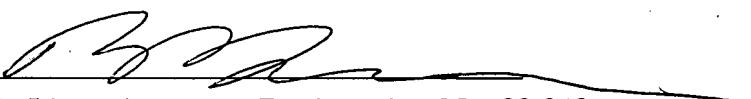
The amended claims are now directed to a LCD display system that is different and novel over Lippmann, Lijima, Wood and Yasue because Lippmann, Lijima, Wood and Yasue do not have the system configuration with the microdisplay controller as an added element that controls the voltage with adjustment of a switchable DC balancing high and low voltages connected to common electrodes to a plurality of pixel cells of the LCD display system. Furthermore, none of the display system as cited prior art reference has a temperature sensor integrated as chip disposed directly on the backplane of the of a silicon die immediately next to a liquid crystal material of a LCD microdisplay device of the microdisplay system.

The amended claims 1-26 are therefore different, novel and not obvious over the cited prior art references and would be allowable as now amended.

With the amended drawings, specification and claims and the reasons provided above, the applicant hereby respectfully requests that Examiner's objections and rejections under double patenting and under 35 USC § 103 be withdrawn and the present application be allowed.

Respectfully submitted,  
Edwin Lyle Hudson

By



Bo-In Lin -- Attorney, Registration No. 33,948  
13445 Mandoli Drive, Los Altos Hills, CA 94022  
(650) 949-0418 (Tel), (650) 949-4118 (Fax)